

L 36462-66

ACC NR: AP6018802

2

The muon transition rate from the deuteron muon atom to carbon and oxygen has been found from experimental deuteron muon ranges and Auger electron yields. The formation rates of proton deuteron muon and deuteron deuteron muon molecules (reduced to the density of liquid hydrogen and deuterium) have been found to be $\lambda_{p\mu} = (1.8 \pm 0.8) \cdot 10^6 \text{ sec}^{-1}$, $\lambda_{d\mu} = (0.75 \pm 0.11) \cdot 10^6 \text{ sec}^{-1}$. Estimate of the relative yield of the reaction $d\mu + d \rightarrow dd\mu \rightarrow t\mu + p$ shows that the relation of the yield of $d\mu + d \rightarrow dd\mu \rightarrow t\mu + p$ to the yield of $d\mu + d \rightarrow dd\mu \rightarrow p + t + \mu^-$ is less than 0.14 with a 90% probability. Analysis of experimental data on the reactions $d\mu + p \rightarrow pd\mu \rightarrow \text{He}^3 + \mu^-$ and $d\mu + p \rightarrow pd\mu \rightarrow \text{He}^3\mu + \gamma$ leads to the conclusion that the resonance mechanism of the formation of deuteron deuteron muon molecules is likely to be the reason for the large yield of the two deuteron fusion reactions under conditions of experiments conducted by the authors. The authors thank Yu. V. Katyshev, M. Friml,

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ACC NR: AP6018802

and Ye. D. Shcherbakov for their participation in the initial stage of
this work, and S. S. Gershteyn for his valuable discussions. Orig.
art. has: 9 figures, 19 formulas, and 5 tables. [Based on authors'
abstract] [NT]

SUB CODE: 20/ SUBM DATE: 23Dec65/ ORIG REF: 012/ OTH REF: 010/

Card 3/3 *JS*

L 1043-45 INT(m) DIAAP/AFWL/SSD/ESD(t)

ADMISSION NR: AP4047891

S/0056/64/147/014/1243/1256

Authors: Dzholepov, V. P.; Yermolov, P. F.; Moskalev, A. I. Fil'-
skov, V. V.; Priml, M.

Title: Elastic scattering of dMu mesic atoms by protons, deuter-
on and complex nuclei

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47,
no. 4, 1964, 1243-1256

TOPIC TAGS: elastic scattering, mu mesic atom, proton scattering,
deuteron scattering, complex nucleus scattering, scattering cross
section

ABSTRACT: This is a continuation of earlier experiments by the
authors (ZhETF v. 42, 439, 1962; Proc. of 1962 Intern. Conf. on
High Energy Physics, p. 114, 1962; ZhETF v. 44, 1963).
Describes further experiments on the kinetics of d μ atomic pro-

ceeds 2/4

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ACCESSION NR: AP4047891

cesses. The range distribution of d_1 atoms in hydrogen containing
 unknown concentrations of deuterium and of Z -isotopes has been obtained and
 compared with the known cross sections for elastic scattering of d_1 atoms.
 The experiment was carried out using a diffusion chamber of d_1 atoms. The
 diffusion chamber has a diameter 380 mm, the magnetic field was
 100 G, and the negative mesons were obtained from the CERN
 synchrotron, slowed by a filter, and stopped in the gas of the
 chamber. A detailed description of the experimental setup and con-
 ditions was given in the cited earlier papers. The data reduction
 and program are described. The cross sections were de-
 termined by a χ^2 comparison of the experimental distribution with
 the values calculated by the Monte Carlo method. The values obtained
 for the elastic scattering cross sections agreed well with the theory.
 The range of the d_1 atom in hydrogen gas was determined experimentally.
 The results for the cross sections for elastic scattering and for
 various processes, obtained experimentally and the-

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oretically, are:

Process	Experiment	Theory
$d\mu + d \rightarrow d\mu + d$	$(4.15 \pm 0.29) \cdot 10^{-17}$	$1.1 \cdot 10^{-17}$
$d\mu + p \rightarrow d\mu + p$	$(0.8 \pm 0.4) \cdot 10^{-17}$	$1.5 \cdot 10^{-17}$
$d\mu + Z \rightarrow d\mu + Z$	$(1.2 \pm 0.3) \cdot 10^{-18}$	$\sim 10^{-18}$

An analysis analogous to that described in the article is in progress for the scattering of $\mu\mu$ atoms by protons and the results of the present work are being applied to an interpretation of the yields of the reactions $p + d\mu \rightarrow \text{He}^3 + \mu^-$ and $d\mu + d \rightarrow t + p + \mu^-$, which will be reported later. "The authors are grateful to S. B. Zhurav, Yu. M. Kazarinov, I. N. Silin, E. M. ... for the measurements." Orig. art. has: 10 figures, 9 formulas and 1 table.

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ACCESSION NR: AP4047891

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy
(Joint Institute of Nuclear Research)

SUBMITTED: 13May64

ENCL: 00

SUB CODE: NP

NR REF SOV: 006

OTHER: 007

Card 4/4

L 5332-66 EWT(m)/T/EWA(m)-2

ACCESSION NR: AP5021098

UR/0056/65/049/002/0393/0405

AUTHORS: Dzhelepov, V. P.; Yermolov, P. F.; Fil'chenkov, V. V.

TITLE: Scattering of μ atoms by protons

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 2, 1965, 393-405

TOPIC TAGS: mu meson, meson interaction, proton interaction, elastic scattering, scattering cross section, proton scattering

ABSTRACT: This is a continuation of an earlier investigation (ZhETF v. 42, 439, 1962) of the reaction $\mu + p \rightarrow \mu + p$. In the present work this process was investigated in greater detail for the purpose of determining the spin state of the μ atom prior to muon decay or muon capture by the proton. The experimental equipment and procedure were similar to that used previously, and the statistics accumulated were increased by one order of magnitude. The cross sections were determined from the analysis of the distributions of the number of

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ACCESSION NR: AP5021098

events of a function of the μ -atom mean free path under different operating conditions. The mean free path distributions of the μ atoms were obtained with the aid of a diffusion chamber at various hydrogen densities and impurity (carbon, oxygen) concentrations. An analysis shows that the μ atom lifetime can be reconciled with theory by assuming for the $\mu + p$ system an effective cross section $1.73 \pm 0.19 \times 10^{-19} \text{ cm}^2$. The cross section for the elastic scattering of μ atoms by protons is found to be $1.67 \pm 0.30 \times 10^{-19} \text{ cm}^2$ for the singlet spin state of the μ atom. This is larger than predicted by the theory, and may be due to the existence of a low energy virtual level in the μp system. The most probable transition rate from the triplet state of the μ atom to the singlet state is $\sim 10^{10} \text{ sec}^{-1}$, with complete depolarization except when the pressure reaches the order of an atmosphere. The rate of formation of μ -mesic molecules in the para state is negligibly small compared with the ortho state. It is also shown that the transition of the muon from the proton to the carbon and oxygen nuclei occurs predominately on the high Q_1 and Q_2

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ACCESSION NR: AP5021098

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atomic orbitals, and the probability for direct transition to the 1s level is less than 3 per cent. 'The authors thank S. S. Gershteyn for interest and valuable discussions, and F. L. Shapiro and K. Parlinskiy for a discussion of problems connected with the Krieger-Nelkin method.' Orig. art. has: 7 figures, 15 formulas, and 4 tables

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 03Mar65

ENCL: 00

SUB CODE: NP

NR REF SOV: 009

OTHER: 008

Card 3/3 *md*

FEIL'CHENKOVA, M.D., inzh.; ZLODEXEV, A.V., inzh.

Automatic control of a ventilation and drainage apparatus. Ugol'.
prom. no.6:48-53 N-D '62. (MI-A 16:2)

1. Gosudarstvennyy proyektno-konstruktorskiy institut avtomatizatsii
rabot v ugol'noy promyshlennosti.
(Mine drainage) (Fans, Mechanical) (Automatic control)

5(4)

AUTHORS:

Antonova, L. G., Ivanovskiy, F. P., Fil'chenkova, T. G.,
Krasil'shchikov, A. I.

SCV/76-33-2-28/45

TITLE:

Adsorption Phenomena in the System Hydrogen - Carbon Dioxide -
Carbon Monoxide - Water Vapor I (Adsorbtsionnyye yavleniya v
sisteme vodorod - uglekislota - okis' ugleroda -vodyanoy
par.I)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 2,
pp 416 - 421 (USSR)

ABSTRACT:

The catalytic reaction of carbon monoxide with water vapor
yielding hydrogen and carbon dioxide has been often inves-
tigated (Refs 1-7). The present experiments concerning the
adsorption of these components were carried out according
to a somewhat modified method (Ref 8). No electrode polariza-
tion was produced, but the potential of the internal
electrode was measured. The gas was adsorbed onto a porous
metal film which served as an electrode and which was
applied to glass. A metal film of silver maintained in an
air atmosphere served as the comparison electrode. The
reaction cell (Fig 1) was produced from a special glaseous

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Adsorption Phenomena in the System Hydrogen - Carbon
Dioxide - Carbon Monoxide - Water Vapor I

SOV/76-33-2-28/45

material conductive at higher temperatures and which was attached to the testing apparatus (Fig 2). Experiments on copper films showed (Fig 3) that at 300°C (potential ca - 1250 mv) an extension of the potential to positive values takes place with an increase in moisture. The hydrogen adsorption at 250°C (potential ca -1200 mv) (Fig 5) has a different character than at 300°C since the influence of the moisture exerts a stronger irreversible effect. The adsorption of CO₂ on copper occurs at 250°C with a potential of ca -500 mv (Fig 6). The adsorption of H₂ and CO₂ on cobalt films occurs similarly to that on the copper films (potential at 250°C ca - 1100 mv) (Figs 8-10). The experimental results show that the measurement of the potential of metallic films is an important method for investigating gas adsorption. There are 10 figures and 21 references, 12 of which are Soviet.

ASSOCIATION: Institut azotnoy promyshlennosti, Moskva (Institute of the
Nitrogen Industry, Moscow)

Card 2/3

Adsorption Phenomena in the System Hydrogen - Carbon
Dioxide - Carbon Monoxide - Water Vapor I

SOV/76-73-2-23/45

SUBMITTED: July 9, 1957

Card 3/3

S/076/60/034/012/012/027
B020/B067

AUTHORS: Antonova, L. G., Fil'chenkova, T. G., Ivanovskiy, F. P.,
and Krasil'shchikov, A. I.

TITLE: Adsorption Phenomena in the System Hydrogen - Carbon
Dioxide - Carbon Monoxide - Water Vapor. II. Adsorption of
Carbon Monoxide

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 12,
pp. 2766-2771

TEXT: The authors attempted to study the electrochemical adsorption potential of carbon monoxide on various metals by using the same methods as described in Ref. 1. The reproducibility of the measurements was approximately ± 25 mv, the accuracy of measurement was ± 1 mv. The adsorption experiments with carbon monoxide were made to study the conversion of carbon monoxide with water vapor. CO was purified by passing it through a furnace filled with reduced copper at 350° , furthermore through a furnace filled with copper, precipitated on silica gel at 250° , by a freezing trap at approximately -70° , askarite, charcoal, and

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Adsorption Phenomena in the System Hydrogen -
Carbon Dioxide - Carbon Monoxide - Water Vapor
II. Adsorption of Carbon Monoxide

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B020/B067

silicagel. At the beginning of the measurements the curves potential versus time took a somewhat irregular course which was, however, equalized after 1.5 to 2 hours. The adsorption of CO by a cobalt film at 250°C (Fig. 1) and of CO and hydrogen on iron at 425°C (Fig. 2), and on nickel at 425°C (Fig. 3) is graphically illustrated. The adsorption diagrams of hydrogen and CO on silver at 425°C (Fig. 4), copper at 425°C (Fig. 5), and after nitrogen adsorption at 425°C (Fig. 6) are also given. Fig. 7 shows the adsorption potentials of carbon monoxide on various metals which clearly express the characteristic behavior of copper. The adsorption potential of carbon monoxide on copper is approximately by 300 mv more negative than in all other metals studied. This fact can be explained by the complex electron structure of carbon monoxide and by the selective character of the adsorption affinity. Actually, copper is usually recommended as specific catalyst for the reaction of CO with oxygen, whereas nickel and iron are used for its reaction with hydrogen. There are 7 figures and 15 references: 12 Soviet, 1 US, and 2 British.

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Adsorption Phenomena in the System Hydrogen - S/076/60/034/012/012/027
Carbon Dioxide - Carbon Monoxide - Water Vapor B020/B067
III. Adsorption of Carbon Monoxide

ASSOCIATION: Gosudarstvennyy institut azotnoy promyshlennosti (State
Institute for the Nitrogen Industry)

SUBMITTED: March 25, 1959

Card 3/3

KRASIL'SHCHIKOV, A.I.; ANTONOVA, L.G.; BIRYUKOVA, Z.M.; KARATAYEVA, I.M.;
FIL'CHENKOVA, T.G.

Activated adsorption of nitrogen. Zhur.fiz.khim. 37 no.1:204-206
Ja '63. (MIRA 17:3)

1. Institut azotnoy promyshlennosti.

L 5300-66 EWT(m)/EPF(c)/EWP(j)/T RM

ACC NR: AP5025022

SOURCE CODE: UR/0286/65/000/016/0081/0081

AUTHORS: Dobrynina, L. Ye.; Fil'chikov, A. S.; Khromova, N. S.; Pavlov, S. A.

ORG: none

TITLE: A method for plasticizing polyamide products. Class 39, No. 173932

SOURCE: Byulleten' izobretenii i tovarnykh znakov, no. 16, 1965, 81

TOPIC TAGS: plastic, polyamide, formaldehyde

ABSTRACT: This Author Certificate presents a method for plasticizing polyamide products (such as films) with polyesters. To improve their quality, the products are treated with formaldehyde.

SUB CODE: MT,GC/ SUBM DATE: 02Jul64/ ORIG. REF: 000/ OTH REF: 000

Card 1/1

UDC: 678.675.674.002.2:547.281.1

FILICHKIN, I.F.; KUKURUZNYAK, I.S.; ZEL'TSER, I.G.; VITIN, G.V.;
LIFSHITS, A.G.

Open-hearth furnaces or oxygen converters. Stal' 21 no.9:
792-798 S '61. (MIRA 14:9)

1. Cherepovetskiy metallurgicheskiy zavod (for Filichkin).
2. Zavod "Krivorozhstal'" (for Kukuruznyak, Zel'tser).
3. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov (for Vitin, Lifshits).
(Open-hearth furnaces) (Converters)

FILCHOVSKA, P.D.

Spectral determination of germanium in coal ashes. Khim i industriia
24 no. 6:204-205 '62.

FIL'CHUK, A.

Photographic pictures in wall newspapers. Sov.foto 20
no.2:47 F '60. (MIRA 13:7)

1. Slantsepererabatyvayushchiy kombinat "Kokhtla-Yarve".
(Wall newspapers)

WILSON, P.G.

Seeds among the crops on the collective farms of Ordynskoye
District. Trudy TSSBS no.6:338-342 '63. (Mik. 17:7)

5(4)

AUTHORS:

Lamp, F. V., Fild, F. G.

SOV/76-33-3-37/41

TITLE:

On the Proton Affinity of Methane Determined by the Method of Ion Impact (O srodstve metana k protonu, opredelennom metodom ionnogo udara)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 3, pp 732-733 (USSR)

ABSTRACT:

Talrose and Frankevitch demonstrated in a paper (Ref 1) how it is possible to determine the upper and lower limit of proton affinity of saturated molecules by investigating the reaction of the molecular ion in the ionization chamber of a mass spectrometer. In this paper it is stated that, "if no reaction is observed, an endothermic reaction takes place", which is refuted by the authors of the present paper. The experimental results of a previous paper were therefore listed and explained. Mention is made of the results obtained with the mixtures $\text{CH}_4\text{-D}_2$ (Table 1) at changed pressure of D_2 , constant pressure of D_2 (Table 2), and changed pressure of CH_4 and the mixtures $\text{CD}_4\text{-H}_2$ (Table 3). It was found that the reactions

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On the Proton Affinity of Methane Determined by the Method of Ion Impact SOV/76-33-3-37/41

$D_2^+ + CH_4 \rightarrow CH_4D^+ + H$ (1) $CH_4^+ + D_2 \rightarrow CH_4D^+ + H$ (2) as well as $H_2^+ + CD_4 \rightarrow CD_4H^+ + H$ (3) $CD_4^+ + H_2 \rightarrow CD_4H^+ + H$ (4) do not take place. It is assumed that this holds also for similar reactions with compounds containing only hydrogen. The reactions which lead to the formation of CH_5^+ and the corresponding deuterium isotopes indicate that the proton affinity of methane is not below 113 kcal/mole. There are 3 tables and 2 references.

ASSOCIATION: Khumbl Oyl and Rifayning Kompani, Otdeleniye nauchno-issledovatel'skikh rabot i usovershenstvovaniy, Beytaun, Tekhas (Humble Oil and Refining Company, Department for Scientific Research Work and Development, Baytown, Texas)

SUBMITTED: November 19, 1958

Card 2/2

FILDAN, Mircea
~~SURNAME~~ (in caps); Given Names

Country: Rumania

Academic Degrees: --

Affiliation: --

Sources: Bucharest, Comunicarile Academiei Republicii Populare Romine,
No 5, 1961, pp 525-527.

Data: "On Ensembles With Non-Connected Complementaries."

FILDAN, Mircea

Ensembles with nonconnex complement. Comunicarile AR 11 no.5:525-527 My '61.

1. Comunicare prezentata de academician Miron Nicolescu, membru al Comitetului de redactie, "Comunicarile Academiei Republicii Populare Romine"

USSR/Cultivated Plants - Fruits. Berries.

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82557

Author : Fil'dberg, K.A.

Last :

Title : Frost Resistance in Grape in Donbas

Orig Pub : Sad. i ogorod, 1958, No 1, 68-70

Abstract : Winter injuries to grape in Stalinskaya and Voronezhskaya oblasts lower severely the productivity of the vineyards. According to the data of the test at the Donetskaya Experimental Station of Viticulture (Stalino) in 1953-1956, the following varieties have a heightened frost resistance: Krasavitsa Tsegleda, Zhemchug Saba, Lidiya, Seedling Malengra and Matyash Yanosh. Moderately and mildly winter resistant varieties are also indicated.

Card 1/1

FIL'DBRIN, M.G.

GRYAZNOV, N.S.; LAZOVSKIY, I.M.; FIL'DBRIN, M.G.

Basic principle of coal crushing in preparation for coking. Koks i
khim. no.8:3-10 '56. (MIRA 10:1)

1. Vostochnyy uglekhimicheskiy institut.
(Coal, Pulverized)

FILDER, B.

"Remarks on an REI Lecture", p. 3

"The Flyers' Organization in Szolnok, a Leading Fighter in the Fulfillment of the Plan", p. 3 (REFULES, Vol. 7, no. 3, Feb. 1954, Budapest, Hungary).

Source: Monthly List of East European Accessions, LC, Vol. 3, no. 5, May 1954/Uncl.

FILDISEVSKI, P.

Case of Dercum's disease. Neuropsihijatrija 2 no.1-2:66-71 1954

1. Iz Neuropsihijatrijske klinike Medicinskog fakulteta u Skoplju
(Direktor: Prof. Dr. B.Niketic)
(ADIPOSIS DOLOROSA, case reports)

YUGOSLAVIA/Human and Animal Physiology. The Nervous System

T-12

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65695

Author : Eldisovski P.

Inst : -

Title : The Problem of Activation of the EEG in Epilepsy

Orig Pub : Neuropsihijatrija, 1957, 5, No 1, 56-66

Abstract : In order to elicit diffuse pathology on the EEG in epilepsy, hyperventilation and stimulation with a flashing light were employed with success. For purposes of topical diagnosis in focal epilepsy, use was made of meginide, which does not cause the undesirable side effects characteristic of metrazol.

Card : 1/1

FILDISEVSKI, Petar; SERDOBINSKAJA, Lidijsa

Personal experiences in the treatment of psychosis with
chlorpromazine. Med. glas. 11 no.2:44-48 Feb 57.

1. Neuropsihijatrijska klinika Medicinskog fakulteta u Skoplju
Upravnik: prof. dr. B. Niketic.
 (CHLORPROMAZINE, ther. use
 psychosis (Ser))
 (PSYCHOSES, ther.
 chlorpromazine (Ser))

FILDISEVSKI, P.

Electroclinical manifestations of syncopal seizures. Neuro-
psihijatrija 7 no.1-2:74-86 '59.

1. Neuropsihijatrijska klinika Medicinskog fakulteta - Skopje,
upravnik: prof. dr. B. Niketic.

(SYNCOPE physiol.)

(ELECTROENCEPHALOGRAPHY)

FILDISJEVSKI, P., doc. dr.; SERDOBINSKAJA, L., dr.; KALICANIN, P., dr.

Tetany and epilepsy. Med. glasn..13 no.5:253-258 My 1959.

1. Neuropsihijatrijska klinika Medicinskog fakulteta u Skopju,
upravnik: prof. dr. B. Niketic.

(TETANY compl.)

(EPILEPSY compl.)

FILDISEVSKI, P.; TARNIK-MITREVA, Lj.; JANEVA, S.

Neuromyelitis optica (with report of a case). Neuropsihijatrija 8
no.1/2:86-96 '60.

1. Neuropsihijatrijska klinika (Upravnik: Prof. dr. B.Niketic) i
Očna klinika (Upravnik: dr. A.Keckarovski) Medicinskog fakulteta
Skopje

(MYELITIS)

(OPTIC NERVE dis)

FILDISEVSKI, P.

Some current concepts of narcolepsy. Neuropsihijatrija 9 no.2/3:
141-155 '61.

1. Neuropsihijatrijska klinika Medicinskog fakulteta -- Skopje
(Upravnik: Prof. dr Bozidar Niketic).
(SLEEP DISORDERS) (ELECTROENCEPHALOGRAPHY)

YUGO LAVIA

Docent Dr Petar FILDISEVSKI, Neuropsychiatric Clinic of Medical Faculty in Skopje (Neuropsihijatrijska klinika Medicinskog fakulteta) Head (Upravnik) Prof Dr B. NIKETIC, Skopje.

"Antidepressants."

Belgrade, Medicinski Glasnik, Vol 17, No 2, Feb 63; pp 63-66.

Abstract [French summary modified]: After a review primarily of French and US literature, report on 54 patients in six diagnostic classifications, treated during the last 18 months with 4 common antidepressants; 23 excellent, 19 good and 12 poor results - latter may depend more on the diagnostic classification than on drug used, all of these drugs represent a definite progress in therapy.

1/1

FILDISEVSKI, Petar; JOVANOVIĆ, Tih.

On some problems in the diagnosis of sciatica. God.Zborn.
Med. Fak.Skopje no.10:64-78 '63.

1. Neuropsikhiјatriјska klinika medicinskog fakulteta, Skopje
(upravnik: prof. d-r Bozidar Niketić).

FILUISEVSKI, P.; KALICANIN, P.; JOVANOVIĆ, T.; MICEV, M.

On some problems of remote sequelae from cerebrocranial injuries.
God. zborn. med. fak. Skopje 11:99-117 '64.

1. Neuropsihijatrijska klinika medicinskog fakulteta, Skopje
(upravnik: prof. dr. Petar Filuisevski).

FILDISEVSKI, P., prof. dr.

Some mental hygienic problems related to aging. Med. glas. 18
no.12:433-437 D '64

1. Neuro-psihijatrijska klinika Medicinskog fakulteta u Skopju
(Upravnik: prof. dr. P. Fildisevski).

FILDISJEVSKI, P.

Activation of EEG by cardiazol and its role in the differentiation of some clinical pictures in psychiatry. God. zborn. med. fak. Skopje 11:125-238 '64.

1. Neuropsihijatrijska klinika medicinskog fakulteta, Skopje (v.d. upravnik: doc. d-r. P. Fildisjevski).

PA 26/49T31

USSR/Engineering
Construction Industry
Earthquakes

Aug 48

"A Project for New Technical Specification in
Planning Buildings and Constructions in Seismic
Regions," M. Ya. ^FMail'dish, 34 pp

"Stroitel' Prom" No 8

Based on data from various USSR seismological
stations, a map has been constructed showing
relative seismic activity in the USSR. Regions
are classed according the "Ball" scale intensity
of seismic activity. Suggests that specifications

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USSR/Engineering (Contd)

Aug 48

for buildings in such regions, issued in 1939,
are obsolete, and that a new edition should be
published based on up-to-date data from recent
observations (since 1939).

26/49T31

Mail'dish, M. Ya.

FILIPCHEV, Slavcho, inzh.

Determining the capacity of pressure reservoirs in water supply.
Khidrotekh i melior 9 no. 4-106-108 '64.

GABRIEL-V, Jordan B., dots. inzh.; FILDISHEV, Slavcho, inzh.

Brick, reinforced siphons. Khidrotekhnika i melior 9 no.8:246-247 '64.

GANCHEV, Iordan, N., dots. inzh.; FILIPCHEV, Slavcho Al., inzh.

A new construction of surface water reservoirs. Kihdrotebn 1
melior 9 no.9:264-265 '64.

KASSAI, Ferenc, dr., a muszaki tudományok kandidátusa; ~~FIIL~~, ~~Andras~~

Optical methods and instruments in deep drilling. Hidrológiai köz-
löny 43 no.2:122-129 Ap '63.

1. Országos Feldtani Főigazgatóság, Budapest.

FILE, Jenone ..

"Development of productivity and the settlement of the balance of payments in growing national economies" by Jurgen Kromphardt (from "Jahrbucher fur Nationalokonomie und Statistik," no.2, 1962). Reviewed by Mrs. Jenone File. Stat szemle 41 no.4:428-429 Ap '63.

FILE, Jeno, dr.

Differentiation of collective farms. Stat szemle 42 no.11:
1103-1121 N '64.

1. Division Chief, Ministry of Agriculture, Budapest.

1. 2071-65

EXPRESSION NO. 255016912

01/0016/64/300/012/0173/0376

AUTHOR: Fila, Jara (Engineer)

TITLE: Contrast adjustment in the plate circuit of a video amplifier

SOURCE: Elektronika technika, no. 10, 1964, 373-376

TOPIC TAGS: video amplifier, TV receiver, potentiometer

ABSTRACT: Technical data are given on the contrast adjustment in television receiving a potentiometer in the plate circuit of the video amplifier. The potentiometer has been in use in Czechoslovakia since 1958. The potentiometer is shown in the schematic diagram and the operating characteristics are given in the figures.

ASSOCIATION: 00

INCL: 00

REF CODE: 00

NO REF SOV: 000

OTHER: 011

JPRS

JO
Card 1/1

RUMANIA

FILEA, Ivana, Veterinarian, of the Lunca Veterinary District
(Circumscripția Veterinara Lunca), Turnu-Magurele Raion.

"Observations on a Focus of External Mammary Papillomatosis in
Cows."

Bucharest, Revista de Zootehnie si Medicina Veterinara, Vol 16,
No 11, Nov 66, pp 74-76.

Abstract: A discussion of an outbreak of external mammary
papillomatosis on a cooperative farm. The disease was trans-
mitted from sick cows to healthy ones by milking, and to calves
by suckling. The focus was successfully extinguished by the
use of an autovaccine combined with surgical removal of the
tumors starting the tenth day after vaccination. A brief sur-
vey of the therapeutic methods proposed by Rumanian and other
authors for this condition is included.
Includes 4 Rumanian references.

YERMOLINSKIY, V.I.; FILEKIN, P.A.

Effect of the ground upon the amount of hydrocarbons in a caisson.
Gig. i san. no. 4:45-46 Ap '54. (MLRA 7:4)

1. Iz sanitarno-epidemiologicheskoy stantsii Kuybyshevskoy zhelez-
noy dorogi. (Caissons) (Hydrocarbons)

SOV/124-58-3-3210

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 98 (USSR)

AUTHOR: Filekin, V. P.

TITLE: Determination of Resistance by Means of Oscillograms of the Nonlinear Decaying Vibrations of an Elastic System (Opredele-niye sily soprotivleniya po ostsillogrammam nelineynykh zatukhayushchikh kolebaniy uprugoy sistemy)

PERIODICAL: Tr. Kuybyshevsk. aviats. in-t, 1957, Nr 3, pp 239-245

ABSTRACT: The problem of determining the expression of the nonlinear relationship between the force of resistance and the velocity is investigated for vibrations of nonhomogenous bars and plates. It is shown that the problem can be solved on the basis of an analysis of the oscillograms of subsiding vibrations of the tested specimen with application of asymptotic methods of nonlinear mechanics. A specific calculation sample is given. The conditions of smallness of the small parameter the powers of which appear in the expansion are not specified.

G. V. Savinov

Card 1/1

AUTHORS: Soyfer, A.M. and Rilekin, V.P. SOV/147 -58-1-19/22

TITLE: The Structural Damping of Oscillations in Thin-walled Shells of a Type Used in the Components of a Turbo-jet Engine (Konstruktivnoye dempfirovaniye kolebaniy tonkostennykh obolochek tipa korpusnykh detaley GTD.)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Aviatsionnaya Tekhnika, 1958, Nr 1, pp 158-164 (USSR).

ABSTRACT: There is a large group of thin-walled plates and shells which have a very dense spectrum of natural frequencies in their working range. For these the known methods of reducing the amplitude of oscillation are difficult to apply and but little effective. For this reason, the authors have investigated the damping of oscillations by introducing into the structure distributed internal resistances using natural elements of the structure. The basic features of the method are as follows: 1) Damping is achieved by internal resistances arising in the component elements of the structure as it oscillates; 2) Damping of the oscillations is accomplished by distributed (over the surface of the components of the structure) resistive forces; 3) To create a damping effect natural components of the structure are used. The experimental

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SOV/147-58-1-19/22

The Structural Damping of Oscillations in Thin-walled Shells of
a Type Used in the Components of a Turbo-jet Engine

method described in this paper makes possible a qualitative conclusion about the effectiveness of structural damping for thin-walled shells. It is to be noted that a reduction in amplitude by dissipation of energy is accomplished over a wide range of resonance frequencies. This is explained by the resistive forces being distributed. The inner layer of a two-layer shell can be used not only for damping the oscillations and as a force element, but also to increase the heat resistance of the outer layer. This paper is a first attempt at making and investigating shells with structural damping. There are 4 tables and 6 figures.

ASSOCIATION: Kafedra konstruktssii aviadvigateley, Kuybyshevskiy
aviatsionnyy institut (Chair of Aircraft Engine Con-
struction, Kuybyshev Aviation Institute)
SUBMITTED: November 10, 1957
Card 2/2 1. Cylindrical shells--Oscillation 2. Cylindrical shells
--Structural analysis 3. Oscillations--Reduction

69321

S/147/60/000/01/010/018

E191/E581

16.7300 24.1000

AUTHOR: Filekin, V. P.

TITLE: Structural Hysteresis in a Built-up ²⁶Beam in the Absence
of Slipping of the Ends

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya
tekhnika, 1960, Nr 1, pp 83-93 (USSR)

ABSTRACT: In several types of structure, slipping of the beam ends
is prevented by the type of joint and no slipping takes
place at points of maximum deflection. The mechanical
model for the analysis is, therefore, a cantilever
built-up beam loaded at the free end either by a
transverse force alone or together with a bending moment.
Compared with Goodman, L.E. and Klumpp, J.H. ("Analysis
of Slip Damping with Reference to Turbine Blade Vibration",
Journal of Applied Mechanics, 1956, Nr 3), in the problem
considered here, slip is absent at the fixing point and
the free end. In addition the end bending moment
maintains a zero slope at the free end. The beam is
built-up of two strips, generally of different depth,
clamped together with a uniform pressure. The joint

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E191/E581

Structural Hysteresis in a Built-up Beam in the Absence of
Slipping of the Ends

face can transmit shear stresses, whose maximum is the friction stress due to the pressure. The stressed condition in which the joint shear stress exceeds the maximum is examined. The stress function for each strip separately is expressed as a polynomial, quadratic in terms of the length coordinate and cubic in terms of the depth coordinate. Introducing the boundary conditions, the stresses in each strip are derived, first for the transverse force loading and then for the force and moment loading. The results are compared with Goodman and Klumpp, after expressing the displacements and finding the relative slip. A static loading cycle is defined from which the energy dissipation due to slip is derived. The dissipation coefficient, defined as the energy dissipated per cycle to the maximum potential energy during the cycle, is derived and illustrated in a family of curves (Fig 4).

Card 2/4 It depends only on the relative load amplitude (defined

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Slipping of the Ends

as the absolute load amplitude divided by the load at which slipping begins) during the cycle and the ratio of depths of the two strips. However, the maximum of the dissipation coefficient does not depend on the absolute load amplitude, but only on the limiting friction forces and relative strip thicknesses. Experimental verification was obtained on a test rig in which the stress distribution and the slip were measured along the length of the specimen. The slip was measured optically by the movement between marks on the two strips. Good agreement between analysis and measurement was obtained. Nonuniform clamping between the two strips admits local slipping and some dissipation of energy. The dissipation is reduced by increasing the difference in depth between the two strips. Owing to the dependence of the dissipation coefficient on the relative load amplitude, it is

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Structural Hysteresis in a Built-up Beam in the Absence of
Slipping of the Ends

concluded that in the course of dynamic loading when the specific joint pressure decreases, and with the same load amplitude a larger relative amplitude develops, a substantial increase of damping takes place up to a maximum (as illustrated in Fig 4). Subsequently, the relative amplitude increases still further and the damping diminishes and approaches zero asymptotically. At this point, the structure loses its load carrying capacity. There are 9 figures, 1 table and 6 references, 4 of which are Soviet and 2 English.

ASSOCIATION: Kafedra konstruktsii aviadvigateley, Kuybyshevskiy
aviatsionnyy institut (Chair of Aircraft Engine
Construction, Kuybyshev Aviation Institute)

SUBMITTED: October 5, 1959

Card 4/4

38619

10 9110

S/147/60/000/004/011/016

E191/E281

AUTHOR: Filekin, V. P.
TITLE: Structural Hysteresis in Flange and Lap Joints
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Aviatsionnaya tekhnika, 1960, No. 4, pp. 107-116

TEXT: Bolted, riveted and welded joints in machine and other structures are subject to deformation. Under certain conditions, slippage along the contact faces is possible. Such slippage will cause a dissipation of energy which can be used for damping purposes. A composite cantilever beam consisting of two parts bolted together, is used as the simplest example for analysis. Experiments were carried out to verify the analytical and numerical derivations. Certain general conclusions were obtained. An increase in the number of slippage zones (fastening element in the joint) leads to an increase of the relative stiffness of the joint. Other things being equal, the energy dissipation coefficient which expresses the damping property of the structure is reduced. Riveted and bolted (or pinned) joints have, under otherwise identical conditions, a larger damping capacity

Card 1/3

88619

S/147/6C/000/004/011/016

E191/E281

Structural Hysteresis in Flange and Lap Joints

compared with welded joints. With a large number of slippage zones, it is necessary to take account of the elasticity of the fastening element. The dissipation coefficient should then be determined from an experimentally measured value of the relative stiffness (relating the stiffness of the fastener elements to the stiffness of the structural element between them. The majority of practical structures operate at relative stiffnesses near unity. For this reason, small variations in the manufacture processes of batch produced structures (increasing the pre-load of bolts, the conditions of the surface and other factors) may lead to variations of the damping capacity of the structure by a factor of several dozen. As a result, of such variations, sudden inexplicable vibration troubles may appear in individual specimens of otherwise acceptable batches. Making use of vibration damping in practical designs, it is possible to obtain dissipation factors for damping purposes in the range of 6-30% (defined as the dissipation of energy per cycle in terms of the energy stored under maximum deformation).

X

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88619

S/147/60/000/004/011/016
E191/E281

Structural Hysteresis in Flange and Lap Joints

There are 8 figures and 3 Soviet references.

ASSOCIATION: Kuybyshevskiy aviatsionnyy institut, Kafedra
konstruktsii aviadvigateley
(Kuybyshev Aviation Institute, Department of Design
of Aircraft Engines)

SUBMITTED: March 21, 1960

X

Card 3/3

S/681/62/000/008/002/004
E081/E141

AUTHOR: Filekin, V.P.

TITLE: Forced vibrations of a compound bar with an end mass

SOURCE: Akademiya nauk latviyskoy SSR. Institut avtomatiki i mekhaniki. Voprosy dinamiki i prochnosti. no.8, 1962, 13-27

TLXT: The paper is a continuation of previous work by the present author (IVUZ, Aviatsionnaya tekhnika, no.1, 1960, and no.4, 1960). The vibrations of a compound bar with an end mass serve as a model for the vibration behaviour of many systems containing flange and seam joints, for example the vibrations of a gas turbine under the influence of the inertial forces of the rotor. Consideration of the vibrations is necessary to determine the dependence of natural frequency on amplitude, the conditions for the onset of resonance, the dynamic coefficient of amplitude amplification, and the parameters of the system corresponding to maximum damping. The differential equation appropriate to the vibrations of a compound bar is set up and solved in generalised coordinates by the method of asymptotic analysis and by the Ritz

Card 1/2

Forced vibrations of a compound...

S/681/62/000/008/002/004
E081/E141

method. The dependence of relative amplitude on frequency detuning, and phase shift between the forces and displacements are both considered. Experimental equipment for studying resonance curves is briefly described, and results obtained with it are shown to agree satisfactorily with theory. It is concluded that the damping of vibrations in a compound bar occurs under certain conditions because of slip in the flange and seam joints. The magnitude of the resonance amplitude depends on the relative stiffness of the joints and the relative amplitude of the driving force. The resonance frequency depends on the relative stiffness of the joints and the relative amplitude of deflection. The equations obtained enable the sequence of tuning of similar systems at maximum damping to be assessed. There are 9 figures and 1 table. ✓

Card 2/2

L 02529-67 EWT(d)/EWT(1)/EWT(m)/EWP(w)/EWP(v)/T-2/EWP(k) IJP(c) JD/WW/EM

ACC NR:

AR6017084

SOURCE CODE: UR/0285/66/000/001/0015/0015

AUTHOR: Setin, A. D.; Soyfer, A. M.; Polyanskiy, I. A.; Filekin, V. P.

TITLE: Rigidity variation and damping capacity of a gas turbine engine housing with horizontal flanged connection

SOURCE: Ref. zh. Turbostroyeniye, Abs. 1.49.114

REF SOURCE: Tr. Kuybyshevsk. aviats. in-t, vyp. 19, 1965, 183-193

TOPIC TAGS: turbine engine, vibration damping, bending stress, material deformation

ABSTRACT: The rigidity of the gas turbine housing has a strong effect on critical rotor conditions. The authors study the change in rigidity and damping capacity when the housing is deformed in models of gas turbine engine housings with horizontal flanged connection. It is shown that bending deformation in housings of this type may cause slippage which reduces the bending rigidity of the housing and increases power dissipation. This type of housing has a two-phase static deformation cycle which is satisfactorily represented by the static cycle of a composite rod properly designed to act as an equivalent rod for the housing. The reduction in housing rigidity due to slippage is 10-30% of the initial value which gives a dissipation factor $\psi=0.2-0.6$. The relative rigidity of the housing and the dissipation factor basically conform satisfactorily to the theoretical relationships. The

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UDC: 621.438-21.001.5

I. 02529-67

ACC NR: AR6017084

amplitudes of ²⁴forced vibrations may be calculated quite accurately from the parameters of the static cycle for the housing as well as from the optimum tightening forces corresponding to maximum deformation. [Translation of abstract]

SUB CODE: 13, 21

Card 2/2 *egk*

L 07496-67 EWP(k)/EWT(d)/EWT(l)/EWT(m)/EWP(w) IJP(c) EM/WW/JD

ACC NR: AR6021257

SOURCE CODE: UR/0264/66/000/002/A008/A009

AUTHOR: Filekin, V. P.

29
B

TITLE: Free vibrations of a sectional rod with a mass at one end

SOURCE: Ref. zh. Vozd transp, Abs. 2A95

REF SOURCE: Tr. Kuybyshevsk. aviats. in-t, vyp. 19, 1965, 247-257

TOPIC TAGS: vibration stress, mechanical strength, stress analysis

ABSTRACT: The report discusses theoretical and experimental studies of free vibrations of a composite rod in the form of two bars clamped to each other. Slippage can occur along the line of contact. The author evolves a nonlinear differential equation for the combined elastic vibrations of the bars, giving effect to the dissipation of energy in the system. A perturbation function is written for different variants of propagation of the slippage phase. The solution is obtained in the form analogous for systems with one degree of freedom in generalized coordinates. Use is made of the method of asymptotic expansions in small parameter stages. Experimental setup is described. Calculated and experimental data were compared, the author notes that dispersion factor values defined from static cycles of such system, which are much easier to obtain experimentally, can be employed with sufficient levels of accuracy when calculating vibrations of real systems with a composite rod deformation pattern. [Translation of abstract] 9 illustrations and bibliography of 5 titles. V. Sibiryakov

SUB CODE: 20
Card 1/1/12/12

UDC: 539.4

L 07497-67 EWP(k)/EWP(d)/EWP(l)/EWP(m)/EWP(w)/EWP(v) 101(G) EWP/07/07/07
ACC NR. AR6021258 SOURCE CODE: UR/0264/66/000/002/A009/A009

AUTHOR: Filekin, V. P.

TITLE: Rigidity and damping capacity of joints, considering the compliance of reinforcing components

SOURCE: Ref. zh. Vozd transp, Abs. 2A97

REF SOURCE: Tr. Kuybyshevsk. aviats. in-t, vyp. 19, 1965, 287-297

TOPIC TAGS: structural analysis, stress analysis, structure panel, WELD EVALUATION

ABSTRACT: The analysis involves an overhang beam of constant cross section, built up from two lengthwise components joined by a hidden seam. The beam is stressed by a uniformly distributed compressive force and a shearing force at its end. The author compiles a system of equilibrium equations for segments between spot welds, giving effect to the rigidity of such welds and the friction between beam components. The calculation program is illustrated. Results of numerical calculations for several methods of joining elements of the beam are compared to experimental data. [Translation of abstract] 5 illustrations and bibliography of 4 titles. V. Zalesov

SUB CODE: 20,13

Card 1/1/

UDC: 539.4

FILEMON, E.

"Production and analysis of polygon profiles." In English, p. 81

PERIODICA POLYTECHNICA. (Budapesti Muszaki Egyetem) Budapest, Hungary
Vol. 3, No. 1, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 6, June 1959
Uncl.

FILEMON, I.

Two aspects of additionally stressed elements.

p. 3
Vol. 3, no. 1, 1955
STAVEBNICKY CASOPIS.
Bratislava

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5, no. 3
March 1956

FILEMON, Jozsef, adjunktus

Measuring the cutting moment caused by drilling and tapping. Gep 15 no.6:222-226 Je '63.

1. Budaepsti Muszaki Egyetem Gepgyartastechnologiai Tanszek.
Tanszekvezeto Dr. Lettner Ferenc, egyetemi tanar.

LETTIER, F., prof. (Budapest, XI., Stoczek u.2); FILEMON, J. (Budapest, XI.,
Stoczek u.2)

Economic machine tool investment. Periodica polytechn eng 6 no.4:237-250
'62.

1. Department of Mechanical Engineering Technology, Polytechnical
University, Budapest.

FILEMON, Jozsef, Adjunktus

Kinematic principles of designing precision mechanisms. Finom-
mechanika 2 no.5:129-133 My '63.

1. Budapesti Muszaki Egyetem Muszaki Mechanika Tanszek.

FILENKO, A.I.

Amperometric determination of manganese, chromium, and vanadium in
alloyed steels. Zav.lab. 29 no.12:1423-1425 '63. (MIRA 17:1)

1. Kramatorskiy industrial'nyy institut.

YILMAZ, A. I.

Determination of manganese, chromium, and vanadium in alloyed steels by amperometric titration with two indicator electrodes.
Zhur. anal. khim. 19 no.6:709-714 '64.

(MIRA 18:3)

L. Kramatorskiy Industriy'nyy institut.

FILENKO, A.J.

Determination of manganese and chromium alloyed steels by
amperometric titration with two indicator electrodes. Ukr.khim.
zhur. 31 no.2:225-228 '65. (MIRA 18:4)

1. Kramatorskiy industrial'nyy institut.

FILENKO, A.I.

Determination of chromium and vanadium in alloyed steels by the
amperometric titration method with two indicator electrodes.
Izv. vys. ucheb. zav.; khim. i khim. tekhn. 8 no.3:397-401 '65.
(MIRA 18:10)

1. Kramatorskiy industrial'nyy institut, kafedra khimii.

150. Quantitative determination of brilliant green
by an iodometric method. G. A. Valerian and
A. R. Filenko (Cent. Pharm. Res. Lab. "GAPU,"
Ministry of Health, Ukr. SSR). *Ispychnye Dela*
1963, 6 (3) 23-24. The method is based on the
reaction of brilliant green with potassium
periodate ($K_2H_6O_8$, N_2O_8). A weighed sample (0.05 to 0.1 g) of brilliant green
in 10 ml of dil. H_2SO_4 in a 100-ml volumetric flask
add 25 ml of 0.1 N iodine soln. and make the soln up to 100 ml with water.
and make the soln up to 100 ml with water.
through cotton wool, together, the water is removed
and titrate the excess of iodine in a 2-ml aliquot of
the filtrate against 0.1 N $Na_2S_2O_3$ soln. 1 ml of 0.1 N
iodine soln. = 0.00393 g of brilliant green.

FILENKO, H.R.

REPORT. L.A.; FILENKO, A.R.

~~REFRACTOMETRIC METHOD~~
Refractometric method for the quantitative determination of alcohol
solutions. Apt.delo 6 no.4:21-26 JI-Ag '57. (MIRA 10:9)

1. Iz TSentral'noy nauchno-issledovatel'skoy apotechnoy laboratorii
(TsNIAL) Glavnogo apotechnogo upravleniya Ministerstva zdravookhra-
neniya USSR
(REFRACTOMETRY) (ALCOHOL)

FILENKO, G.G.

Reconditioning of the sorbent in condensate filters. Koks i
khim. no.9:53. '62. (MIRA 16:10)

1. Zhdanovskiy koksokhimicheskiy zavod.
(Coke industry—Equipment and supplies)
(Filters and filtration)

LEVIN, R.S., professor; BOGOPOL'SKIY, I.A.; FILENKO, M.D.

Mass fluorography of young children. Vest.rent.1 rad. no.6-45-48
N-D '53. (MLRA 7:1)

1. Iz rentgenologicheskogo otdeleniya (zavednyushchiy I.A.Bogopol'skiy
Ob"yedineniya detskoy bol'nitsy im. K.A.Baukhfusa v Leningrade
(glavnyy vrach V.A.Vinogradova).
(Diagnosis, Fluoroscopic) (Tuberculosis--Diagnosis)

FILENKO, M. D.

FD 223

USSR/Medicine - Roentgenology

Card 1/1

Author : Levin, R. S., Professor; Bogopol'skiy, I. A.; Filenko, M. D.

Title : The technique of fluorographic examination of small children

Periodical : Vest. Rent. i Rad. 89-91, Mar/Apr 1954

Abstract : The fluorographic method should find wide use in the prophylactic examination of small children. Describes a special attachment to the fluorograph with which the chest cavity can be examined on an ordinary fluorograph filling the entire screen. Two drawings; two photographs (X-rays).

Institution : X-Ray Department (Chief - I. A. Bogopol'skiy) United Children's Hospital imeni K. A. Raukhfus in Leningrad (Head Physician V. A. Vinogradova).

L 29836-66 EWT(m)
ACC NR: AP6012874

SOURCE CODE: UR/0205/66/006/002/0272/0277

278

AUTHOR: Kudryashov, Yu. B.; Kakushkina, M. L.; Mekhtiyeva, S. M.; Rachinskiy, F. Yu.;
Sumarukov, G. V.; Filenko, O. F.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Comparative evaluation of the protective activity of potential radioprotective agents (Bunte salts) on various biological models

SOURCE: Radiobiologiya, v. 6, no. 2, 1966, 272-277

TOPIC TAGS: radioprotective agent, radiation biologic effect, ~~experiment animal~~
mouse, blood

ABSTRACT: It has been postulated that the aminoalkylthiosulfuric acids or Bunte salts can be hydrolyzed in vivo to yield radioprotective aminoalkylthiols. In order to confirm this and develop a means of testing potential radioprotective agents against in vitro models, the activity of 7 of these salts was compared with that of 3 known radioprotective agents in male white mice irradiated with 200 - 1000 rad, and in intact human erythrocytes.

Card 1/3

UDC: 577.391:628.56

L 29836-66

ACC NR: AP6012874

Radio-protective agents	Chemical formula	Dose			Protection compared to <i>P. aeruginosa</i> erythrocytes			chemical model oxidation of β -carotene
		1	2	3	4	5	6	
							0.01M 0.02M 0.03M	
Antioxidants	1. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
	2. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
Antioxidants	3. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
	4. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
	5. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
	6. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
	7. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
	8. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
	9. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100
	10. N-ACETYL-L-lysine	200	100	-10 ± 1.0	100	100	100 100 100	100

1 - Maximal tolerated dose of the preparation (mg/kg); 2 - Survival to 30 days after irradiation with 700 r; 3 - Δ Ch of mouse tissues (mg) 20-30 min. after (a) of the preparation; 4 - radiation model; 5 - radiomimetic model; 6 - radiation model (200 kr); 7 - radiomimetic model; 8 - concentration of each preparation is 0.00 M; 9 - Concentration of the preparation.

Note: The numbers in parentheses indicate the absolute value of the protective coefficient, representing the ratio $\frac{D_{50}(a)}{D_{50}(b)}$ for the erythrocyte models and the ratio $\frac{D_{50}(a)}{D_{50}(b)}$ for the yeast models, where D_{50} - dose for 50% hemolysis, D_{50} - survival of colonies in % of dose.

D₅₀ (a) indicates addition of a radioprotective agent, and (b) indicates control, i.e. without the addition of a radioprotective agent.

Card 2/3

L 29836-66

ACC NR: AP6012874

haploid yeast cells (*Zygosaccharomyces bailii*), or solutions of β -carotene irradiated with 1000 rad/min; the protective agents were injected intraperitoneally 25 — 30 min before irradiation or added to the suspension 1 — 5 min before irradiation or addition of a radio-mimetic agent. The results shown in the table indicate that compounds can be tested for radioprotective activity in in vitro systems, but that prolonged contact is required. Orig. art. has: 1 table, 1 figure, and 2 formulas. [08]

SUB CODE: 06/ SUBM DATE: 05Aug64/ ORIG REF: 009/ OTH REF: 001/ ATD PRESS: 5.13

Card 3/3 *RV*

FILENKO, R.A.

Hydrological regionalization of relatively small areas as
exemplified by the regionalization of Vologda Province. Vest.
LGU 18 no.6:106-117 '63. (MIRA 16:4)
(Vologda Province--Hydrology)

FILENKO, R.A.

Distribution of mean long-period flow in the Crimea. Nauch.biul.
un. no.24:44-47 '49. (MIRA 10:3)

1. Geografo-ekonomicheskii nauchno-issledovatel'skiy institut.
(Crimea--Stream measurements)

FILENKO, R.A.

Variability of annual stream flow in Central Asia. Uch.zap.Len
un. no.104:258-269 '49. (MLRA 10:1)
(Soviet Central Asia--Stream measurements)

FILENKO, R.A.

Compilation of a map showing the average annual stream flow on the
northern slopes of the Trans-Ili Ala-Tau. Uch.zap.Len.un.no.124:
287-296 '49. (MIRA 9:6)
(Trans-Ili Ala-Tau--Runoff)

1. FILENKO, R. A.

2. SSSR (600)

4. Geographical Research

7. Section on geographic sciences.
Vest. Len. un. 7 No 1, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. FILENKO, R. A.
2. USSR (600)
4. Ponds-Crimea
7. Physiogeographical characteristics for the location of ponds in the Crimean steppes, Vest. Len. un. 7, No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

FILENKO, R.A.

Hydrological characteristics of bog soils of the Sosnovo
District in Leningrad Province. Vest.Len.un. 10 no.4:
75-83 Ap '55. (MIRA 8:8)
(Sosnovo District (Leningrad Province)--Hydrology)

FILENKO, R.A.

Maximum flood stages of rivers in Crimea Province. Vest.Len.un.10
no.7:101-109 JI '55. (MIRA 8:12)

(Crimea--Floods)

FILENIO, R.A.

Hydrological regions of Crimea. Uch.zap.Len.un.no.199:195-214 '55.
(Crimea--Hydrology) (MIRA 9:7)

FILENIKO, R.A.

Twelfth scientific session of Leningrad University (geographical sciences section). Vest.Len.un 11 no.18:149-151 '56. (MLRA 9:12)

(Geography--Congresses)

FILEIKO, R.A.

Thirteenth Scientific Session of the Leningrad State University.
Vest. LGU 12 no.18:149-151 '57. (MIRA:3)
(Geography)

FILENKO, R.A.

Hydrogeological regions of the Karelian Isthmus [with summary in
English]. Vest. IOU 12 no.24:139-151 '57. (MIRA 11:5)
(Karelian Isthmus--Water, Underground)

FILENKO, R.A.

Hydrological characteristics of the Karelian Isthmus. Uch.
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